

# PATENT COOPERATION TREATY

# PCT

REC'D 12 SEP 2005

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



PCT

Applicant's or agent's file reference P 03 049 WO		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DK 03/00372	International filing date (day/month/year) 06.06.2003	Priority date (day/month/year) 06.06.2003	
International Patent Classification (IPC) or both national classification and IPC B81C1/00			
Applicant DICON A/S et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
  - ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 7 sheets.

3. This report contains indications relating to the following items:
  - I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand 20.12.2004	Date of completion of this report 09.09.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Götz, A Telephone No. +49 89 2399-2498 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/DK 03/00372

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

### Description, Pages

1-18 as originally filed

### Claims, Numbers

1-37 received on 11.07.2005 with letter of 08.07.2005

### Drawings, Sheets

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	
	No: Claims	1, 31
Inventive step (IS)	Yes: Claims	
	No: Claims	2-30, 32-37
Industrial applicability (IA)	Yes: Claims	1-37
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

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- 1 Reference is made to the following documents:
- D1: US-B-6 415 068 (SUN D) 2 July 2002
- D2: US-A-2002/0104990 (DEREUS D R ET AL) 8 August 2002
- D3: Helsel M P et al. "Wafer Scale Packaging for a MEMS Video Scanner", Proceedings of the SPIE, Volume 4407, Conference "MEMS Design, Fabrication, Characterization, and Packaging" held at Edinburgh, 30 May - 1 June 2001 published in 2001 in the USA, pages 214-220

The documents D1-D3 were not cited in the international search report.

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

- 2 The application does not meet the requirements of Article 6 PCT, because the claims are not clear. The independent claims do not define the device/method so that it becomes clear what the arrangement of the (fabricated) device is.
- 3 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

The document D3 discloses an optical microelectromechanical structure (MEMS) (see D3, figure 4, figure 7 and section "3.2 Future Work") comprising

- at least one optically transmissive layer (see D3, section "3.2 Future Work", the flat piece of glass)
- at least one intermediate layer structure (see D3, section "3.2 Future Work", the rigid frame)
- at least one device layer (see D3, section "3.2 Future Work", the scanner die)

said intermediate layer structure facilitating one or more optical paths between said substantially optically transmissive layer and said device layer, said intermediate structure layer defining the distance between said optically transmissive layer and said device layer and wherein said microelectromechanical structure (MEMS) comprises a sealed package and where the sealed package is partly comprised by said optically transmissive layers (see D3, section "3.2 Future Work", lines 1-5). Hence all the technical features of claim 1 are known from D3.

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- 4 The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 31, which therefore is also considered not new.